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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,608	05/20/2004	Kelly Scott Carpenter	AUS920040177US1	6729
35525	7590	11/14/2008		
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER MURRAY, DANIEL C	
			ART UNIT 2443	PAPER NUMBER
			NOTIFICATION DATE 11/14/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptonotifs@yeciipaw.com

### Office Action Summary

**Application No.**

10/849,608

**Applicant(s)**

CARPENTER ET AL.

**Examiner**

DANIEL C. MURRAY

**Art Unit**

2443

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 AUG 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4-8, 10-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-8, 10-14, and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on 01AUG2008. **Claims 1-2, 4-8, 10-14, and 16-19** are now pending in the present application. **This Action is made FINAL.**
2. **Claims 3, 9, and 15** have been canceled by Applicant.

### *Drawings*

3. The drawing sheet(s) received on 20MAY2004 are accepted by the Examiner.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-2, 4-8, 10-14, and 16-19** are rejected under 35 U.S.C. 102(b) as being anticipated by **Thebaut et al. (US Patent # 5,889,953).**

a) Consider **claims 1 and 7**, Thebaut et al. clearly show and disclose, a method and computer program product for managing a plurality of computer systems attached to a network (abstract, column 1 lines 12-15, column 2 lines 5-12), said method comprising the computer implement steps of: defining attributes that are of interest in the operation of said computer systems, for each type of element in said plurality of computer systems (column 2 lines 13-21, column 3 lines 25-34, column 5 lines 29-41); assigning values to each of said attributes associated with an element

for each element in said plurality of computer systems (column 3 lines 23-24, column 11 lines 33-48); defining a policy concerning a first set of said elements in terms of relationships between a corresponding first set of values of said attributes associated with said first set of elements and a second set of desired values (abstract, column 2 lines 13-25, column 3 lines 18-24 lines 45-67); and performing at least one operation, chosen from a group of set operations consisting of: filter, projection, section, diagonal, union, intersection, subset, setminus, and cardinal, on said first set of values to determine if said first set of values meets said policy (abstract, column 2 lines 13-25, column 4 lines 9-34, column 6 lines 49-51, column 7 lines 15-16 lines 28-48).

b) Consider **claim 13**, Thebaut et al. clearly show and disclose, a computer system comprising (column 16 lines 54-65): a processor having a connection to a network (column 16 lines 54-65); a keyboard connected to input information to said processor (column 4 lines 51-52, column 5 lines 7-13, column 7 lines 43-44); an output device for providing reporting capabilities (column 3 lines 53-60, column 4 lines 51-52, column 7 lines 43-44); a set of instructions stored in memory and connected to be executed by said processor (column 16 lines 54-65), said set of instructions comprising: first instructions for defining, for each type of element in a plurality of computer systems that are connected to be managed by said computer system, attributes that are of interest in the operation of said computer systems (column 2 lines 13-21, column 3 lines 25-34, column 5 lines 29-41); second instructions for assigning, for each element in said plurality of computer systems, values to each of said attributes associated with said element (column 3 lines 23-24, column 11 lines 33-48); third instructions for receiving a policy concerning a first set of said elements defined in terms of relationships between a corresponding first set of values of said attributes associated with said first set of elements and a second set of values (abstract, column 2 lines 13-25, column 3 lines 18-24 lines 45-67); and fourth instructions for performing at least one operation, chosen from a

group of set operations consisting of: filter, projection, section, diagonal, union, intersection, subset, setminus, and cardinal, on said first set of values to determine if said first set of values meets said policy (abstract, column 2 lines 13-25, column 4 lines 9-34, column 6 lines 49-51, column 7 lines 15-16 lines 28-48).

c) Consider **claims 2, 8, and 14**, and **as applied to claims 1, 7, and 13 above**, Thebaut et al. clearly show and disclose, the method, computer program product, and computer system of claims 1, 7, and 13, further comprising providing a report on compliance to said policy by said first set of elements (column 4 lines 51-52, column 6 lines 54-61, column 7 lines 5-16 lines 28-48).

d) Consider **claims 4, 10, and 16** and **as applied to claims 2, 8, and 14 above**, Thebaut et al. clearly show and disclose, the method, computer program product, and computer system of claims 2, 8, and 14 wherein said reporting step comprises reporting elements that did not comply with said policy (column 6 lines 5-16 lines 49-51 lines 54-61, column 7 lines 28-48).

e) Consider **claims 5, 11, and 17** and **as applied to claims 1, 7, and 13 above**, Thebaut et al. clearly show and disclose, the method, computer program product, and computer system of claims 1, 7, and 13 wherein said defining step uses the relationships of "belongs to" and "does not belong to" (column 2 lines 18-19, column 6 lines 3-14, column 7 lines 5-16).

f) Consider **claims 6, 12, and 18** and **as applied to claims 1, 7, and 13 above**, Thebaut et al. clearly show and disclose, the method, computer program product, and computer system of claims 1, 7, and 13 wherein said defining step uses multiple relationships joined by the operations "and", "or", and "not" (column 6 lines 24-43).

g) Consider **claim 19**, and **as applied to claim 14 above**, Thebaut et al. clearly show and disclose, the computer system of claim 16, wherein said report is provided on said output device (column 3 lines 53-60, column 4 lines 51-52, column 7 lines 43-44).

***Response to Arguments***

3. Applicant's arguments filed 01AUG2008 have been fully considered but they are not persuasive.

Applicant argues *Thebaut* fails to teach the features of: "defining a policy concerning a first set of said elements in terms of relationships between a corresponding first set of values of said attributes associated with said first set of elements and a second set of desired values".

The Examiner respectfully disagrees; Thebaut clearly discloses defining a policy (attaching one or more rule elements to one or more domain elements to create policies)(abstract) concerning a first set of said elements (domain elements representing network devices and groups of network devices) in terms of relationships between a corresponding first set of values of said attributes associated (rule elements defining actions, attributes (actual) values of objects (i.e. domain elements))(abstract, column 2 lines 5-25, column 3 lines 18-24) with said first set of elements and a second set of desired values (attribute (desired) values which cause a rule to trigger)(column 2 lines 5-25). In other words, Thebaut creates policies concerning domain elements (i.e. network devices or groups thereof) by associating the domain elements with rules which take into account the attributes of the domain elements. The values the domain element attributes (actual attribute values) are monitored and controlled by the application of the rules (which have desired values) as defined by policies to trigger the rules, which then trigger actions.

Applicant argues that the claimed feature does not have the rule structure according to the teaching of Thebaut and that the policy structure as claimed does not have an action (among other things) as Thebaut.

In response to Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., rule structure) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Gemm*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). While the rule structure of Thebaut may, or may not be, different than that of Applicant's invention it is not clearly reflected in the claims. Simply because certain features as taught by Thebaut (i.e. rule structure, additional actions, conflicting rules resolution, etc.) are not disclosed by the claimed features does not mean that the claimed features are not disclosed by Thebaut. Applicant is attempting to read the reference onto the claims rather than read the claims onto the reference. Because a reference discloses additional actions/features does not imply that the claimed features are not disclosed by a reference or that the reference would be inoperable if said additional actions/features are not claimed features.

Furthermore, the fact that Thebaut teaches a policy structure with an additional feature (i.e. an action, conflict resolution etc.) beyond that of the claimed invention does not preclude it from teaching the claimed invention. Thebaut clearly discloses the claimed features.

Applicant argues Thebaut fails to teach the features of: "performing at least one operation, chosen from a group of set operations consisting of: filter, projection, section, diagonal, union, intersection, subset, setminus, and cardinal, on said first set of values to determine if said first set of values meets said policy." Furthermore, Applicant has challenged the Official Notice as set forth in the previous Office Action and that the use of a Set Theory-based implementation would render Thebaut inoperative.

The Examiner respectfully disagrees; while Thebaut does not *specifically* disclose performing at least one operation, chosen from a group of set operations consisting of: filter, projection, section,

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diagonal, union, intersection, subset, setminus, and cardinal. Although not explicitly stated the concepts are clearly evident for example, “1. Collect all the domains D of which E is a member” (column 4 lines 15-25) element E is clearly a subset of the domains D or “2. Collect all the rules that apply to each domain D plus the rules for E (column 4 lines 15-25) all the rules that apply to D and E is clearly the union and/or intersection of D and E.

Nonetheless, maintains that Set Theory was notoriously well known to one of ordinary skill in the art at the time the invention was made and would have been obvious to one of ordinary skill in the art to use a branch of mathematics that is concerned with sets of objects and rules for their manipulation and to use the operations as defined by Set Theory to manipulate sets of objects such as network elements, groups of network elements, and rules and policies that apply to network elements and groups of network elements. Please see the provided references.

- Mayer et al. (US Patent #US 2002/0019864 A1) figure 12, paragraph [0081]
- Rogers et al. “Algebraic, Mathematical Programming and Network Models of the Deterministic Job-Shop Scheduling Problem”
- Sumic et al. “Fuzzy Set Theory Based Outage Determination”
- Amutharaj et al. “Dominating Set Theory Based Semantic Overlay Networks for Efficient Content Distribution”
- Peng et al. “Application of rough Set Theory in Network Fault Diagnosis”
- Li et al. “Network Traffic Classification Using Rough Set Theory and Genetic Algorithm”
- Answers.com “Set Theory”
- Britannica.com “Set Theory”
- Merriam-Webster Online Dictionary “Set Theory”
- TechWeb TechEncyclopedia “Set Theory”
- science.jrank.org “Set Theory-Applications of Set Theory”



***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL C. MURRAY whose telephone number is 571-270-1773. The examiner can normally be reached on Monday - Friday 0800-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571)-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DCM/  
Examiner, Art Unit 2443

/Tonia LM Dollinger/  
Supervisory Patent Examiner, Art Unit 2443